AMENDMENTS TO THE CLAIMS

1. (Currently Amended) A pressure loaded pilot valve system for a regulator valve, comprising:

a regulator valve connecting an inlet line carrying fluid at an inlet pressure to an outlet line carrying fluid at an outlet delivery pressure;

a servo control valve assembly;

a pilot valve assembly;

a supply line connected to the servo control valve assembly, carrying fluid at a supply pressure;

a pilot loading pressure line connecting the servo control valve assembly to the pilot valve assembly, carrying fluid at a pilot loading pressure; and

an exhaust line connecting the servo control valve assembly to the outlet line, carrying fluid at an exhaust pressure;

wherein the pilot valve assembly includes a spring-to-close configuration.

2. (Canceled)

3. (Original) The pressure loaded pilot valve system of claim 1, wherein the servo control valve assembly includes an electronic control unit that is operatively connected to a supply pressure solenoid valve.

4. (Original) The pressure loaded pilot valve system of claim 3, wherein the electronic control unit is operatively connected to an exhaust pressure solenoid valve.

5. (Original) The pressure loaded pilot valve system of claim 3, wherein the electronic control unit is operatively connected to a loading pressure transducer.

6. (Currently Amended) A pressure loaded pilot valve system for a regulator valve, comprising:

a regulator valve connecting an inlet line carrying fluid at an inlet pressure to an outlet line carrying fluid at an outlet delivery pressure;

a servo control valve assembly;

a pilot valve assembly, including a pilot valve plug movable between a closed position and an open position, a pilot valve diaphragm operatively connected to the pilot valve plug and attached to a pilot valve puller post, and a pilot valve spring configured to urge the pilot valve puller post and the pilot valve diaphragm in a direction so as to urge the pilot valve plug toward the closed position;

a supply line connected to the servo control valve assembly, carrying fluid at a supply pressure;

a pilot loading pressure line connecting the servo control valve assembly to the pilot valve assembly, carrying fluid at a pilot loading pressure; and

an exhaust line connecting the servo control valve assembly to the outlet line, carrying fluid at an exhaust pressure,

wherein the pilot valve assembly includes a spring-to-close configuration.

7. (Canceled)

8. (Original) The pressure loaded pilot valve system of claim 6, wherein the servo control valve assembly includes an electronic control unit that is operatively connected to a supply pressure solenoid valve.

9. (Original) The pressure loaded pilot valve system of claim 8, wherein the electronic control unit is operatively connected to an exhaust pressure solenoid valve.

10. (Original) The pressure loaded pilot valve system of claim 8, wherein the electronic control unit is operatively connected to a loading pressure transducer.

11. (Original) A method of operating a pressure loaded pilot valve system, having a regulator valve connecting an inlet line to an outlet line, and a pilot valve assembly, the method comprising:

determining a set point;

adjusting fluid pressure supplied to the pilot valve assembly to attain the set point; and

diverting excess fluid pressure from the pilot valve assembly to the outlet line in the event that the fluid pressure supplied to the pilot valve assembly is adjusted downwardly,

wherein the pilot valve assembly includes a spring-to-close configuration.

12. (Original) The method of claim 11, wherein the set point is determined by attaining a desired spring force of a pilot valve spring, the desired spring force corresponding to the set point.

13. (Original) The method of claim 12, wherein the desired spring force is attained by adjusting an adjustable stop-nut associated with the pilot valve assembly.